



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,768	06/10/2005	Bernard RUCHET	AP1012USN	5556
33361	7590	09/14/2006	EXAMINER	
ADAMS PATENT & TRADEMARK AGENCY			SEDIGHIAN, REZA	
P.O. BOX 11100, STATION H			ART UNIT	PAPER NUMBER
OTTAWA, ON K2H 7T8				2613
CANADA				

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SF

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/538,768	RUCHET, BERNARD	
	Examiner M. R. Sedighian	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 August 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,5,8,9,11-15,18,21,22 and 24-27 is/are rejected.
- 7) Claim(s) 3,4,6,7,10,16,17,19,20 and 23 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

1. This communication is responsive to applicant's 8/10/06 amendments and remarks. The amendments have been entered. Claims 1-27 are now pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5, 8-9, 11-15, 18, 21-22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendow, Sami, T. (WO 99/67609) in view of Hentschel et al. (US Patent No: 5,696,707).

Regarding claims 1 and 14, Hendow teaches a portable apparatus (480, fig. 14) for measuring parameters of optical signals (page 5, lines 21-26 and page 6, lines 31-32) propagating concurrently in opposite directions in an optical transmission path between two elements (optical signals are propagating bi-directionally between two elements such as WDM 486 and transceiver 488 and also between WDM 487 and transceiver 488 of fig. 14), at least one of the elements being operative to transmit a first optical signal only if it continues to receive a second optical signal from the other of elements (note that transceiver 488 communicate bi-directionally with each of WDMs 486 and 487, and for example, transceiver 488 receives a second optical signal from WDM 487, and transmit a first optical signal to WDM 486), wherein the instrument apparatus is being connected into the optical transmission path in series therewith (the network node 480, or the instrument apparatus 480, is being connected in series with the optical transmission path that is connected to node 480) and means for propagating (for example, WDM 487) the

second optical signal toward one of the elements (for example, optical signals that are propagating from East to West direction toward optical network 482, network node 480, and transceiver 488) and measuring the parameters of concurrently propagating optical signals (page 16, lines 9-28). Hendow differs from the claimed invention in that Hendow does not specifically disclose a first and a second connector means for connecting the instrument into the optical transmission path. However, it is well known to incorporate optical connectors for connecting optical elements or measurement apparatuses to an optical transmission path. For example, Hentschel teaches optical connectors (40, 43, fig. 1) that can be used to connect a test set (the amplifier test set, fig. 1) to a transmission fiber (20, 35, fig. 1). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention that the measurement node 480 of Hendow is connected to the transmission path through connector means, or to incorporate optical connectors means such as the ones of Hentschel, for connecting the apparatus node 480 of Hendow to the transmission fiber to provide proper and precise transmission of optical signals between nodes and elements of the network.

Regarding claims 2 and 15, Hendow teaches propagating and measuring means provides an optical signal path between the first and second connector means for conveying at least a portion of the second optical signal (a portion of optical signal propagating toward node 480, passes through transmission fibers that are connected to the node 480 in either side).

Regarding claims 5 and 18, Hendow teaches one of the elements (for example, transceiver 488) also receives via the optical transmission path a third optical signal at a different wavelength (for example, the 1510 nm supervisory channel, shown in fig. 14)

from the second optical signal (the WDM optical signal tapped from WDM 487), and the propagation and measuring means further comprises means for measuring parameters of the third optical signal (488, 490, 484, fig. 14).

Regarding claims 8 and 21, Hendow teaches the measuring means comprises a separate detector for each of the measured optical signal portions (the detectors or optical receivers in the transceiver 488).

Regarding claims 9 and 22, Hendow discloses one of the signals is analog (page 12, lines 6-14), and the measuring means is arranged to extract the time-averaged optical power of the signal (page 8, lines 17-20, page 13, lines 30-31, page 14, lines 1-5 and 454, fig. 13).

Regarding claims 11 and 24, Hendow teaches the measuring means comprises custom circuitry (the custom circuitries of the transceiver 488 and network monitor 484).

Regarding claims 12 and 25, Hendow discloses measuring means comprises a suitably-programmed microcomputer (page 16, lines 17-28 and page 18, lines 5-7).

Regarding claims 13 and 26, Hendow discloses a measuring can comprise a display means (492, fig. 14) to display the measured parameters (page 16, lines 20-21).

Regarding claim 27, Hendow teaches the measurements are performed upon optical signals propagating concurrently in opposite directions in an optical transmission path between elements in a passive optical network (page 16, lines 9-23).

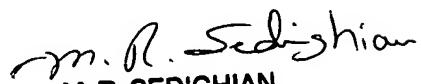
4. Claims 3-4, 6-7, 10, 16-17, 19-20, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Applicant's arguments with respect to claims 1 and 14 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
M. R. SEDIGHIAN  
PRIMARY EXAMINER